

II. SPECIFICATION AMENDMENTS

Please replace the paragraph on page 15, line 8 through line 11 as rewritten below:

Figure 11a illustrates a cross section of a first embodiment of the micromechanical RF resonator in accordance with the invention. Figure 11b illustrates a top view of the first RF resonator embodiment. One should note that the cross section that is shown in figure figure 11a is shown along the dash lines A-B of figure 11b.

Please replace the paragraph beginning on page 16, lines 1 through 3 as rewritten below:

In a preferred embodiment the gap 12 between the capacitor electrodes 8 and 11 is an air gap. ~~A second~~The first dielectric ~~layer~~layer 7 is advantageously used as a sacrificial layer in creating the air gap 12.

Please replace the paragraph on page 16, lines 14-25, as rewritten below:

In some preferable embodiments some or all of the substrate 3 is removed under the first capacitor electrode 8 of the capacitor structure 2, and also some or all of the substrate 3 can be removed under the planar inductor coil 1. The substrate is advantageously removed at the location where the capacitor 2 forms the actual variable capacitance, because the parasitic capacitance is thus reduced. The substrate removal is preferably done with isotropic or anisotropic etching, from either side of the substrate wafer 3. Parasitic capacitance is even further

reduced if the substrate is etched wholly or partly where the coil 1 is located. This substrate removal may be executed simultaneously and with the same means and methods as the substrate removal at the location of the electrode 8 of the capacitor arrangement 2. The first dielectric insulating layer 5 is arranged as a suspending supporting structure for the capacitor electrode 8 and the planar inductor coil 1.

Please replace the paragraph on page 16, lines 14-25, as rewritten below:

Figure 12 illustrates a second embodiment of a resonator according to the invention. The resonator comprises most of the same parts as the first embodiment of ~~figures 1a and 1b~~figures 11a and 11b. However, the second capacitor electrode 11b is folded and/or corrugated 14 to at least two levels with respect to the first capacitor electrode 8. In some preferable embodiments the vertical portions of the folds and/or corrugates 14 can be fabricated thinner than the lateral portions of the second capacitor electrode 11b.